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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,490	05/25/2001	David T. Auckland	10599/17	4403

7590 06/03/2004

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CHICAGO, IL 60610

EXAMINER

PHU, SANH D

ART UNIT	PAPER NUMBER
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2682

7

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,490

Applicant(s)

AUCKLAND ET AL.

Examiner

Sanh D Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

- I. Claims 1–11, drawn to a communication transceiver system having a tuning capability, classified in class 455, subclass 77.
- II. Claims 12–14, 29–30, 34–36 and 40–43, drawn to a system comprising a first antenna and second antenna, each comprises a tunable device including voltage variable capacitance elements operating responsive to tuning control signals, or drawn to a system comprising at least two antenna tunable means for identifying current operating frequencies for controlling the antenna tuning, or drawn to a system tuning a transmit antenna based on detecting of a detuning condition and providing a correction signal to correct the detuning condition, or drawn to a system comprising a forward power detector wherein a an antenna

control unit receives a transmit power signal from the forward power detector and produces a transmit power indication , classified in class 343, subclass 702.

- III. Claims 15–28, drawn to a communication interface for configuring a communication device, classified in class 455, subclass 84.
- IV. Claims 31–33 and 37–39, drawn to communications between a portable radio and remote station in controlling tuning a transmit antenna at the portable radio, or drawn to operation of a base station in returning a signal to a remote radio for reducing error in communications, classified in class 455, subclass 68.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions I and II are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the

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combination (Invention I) as claimed does not require the particulars of the subcombination (Invention II) as claimed because:

- the invention [I] does not require tunable antennas each including voltage capacitance elements responsive to tuning control signals from an antenna control unit for tuning the respective tunable antenna; and the subcombination has separate utility such as voltage capacitance elements, etc., as recited in claims 12-14;

- the invention [I] does not require procedures of identifying one or more current operating frequencies for a radio device; and providing the tuning control signals for tuning two or more antennas to the one or more current operating frequencies; and the subcombination has separate utility such as radio control means, antenna control means, etc, as recited in claims 29-30;

- the Invention [I] does not require procedures of detecting a detuning condition and providing a correction to correct the detuning condition; the subcombination has separate utility such as a remote radio, etc, as recited in claims 34-36.

–the invention [I] does not require procedures of receiving a transmit power signal from a forward power detector and producing a transmit power indication; and the subcombination has separate utility such as a forward power detector, a programmable radio frequency front end component, etc, as recited in claims 40–43.

3. Inventions I and III are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination (Invention I) as claimed does not require the particulars of the subcombination (Invention III) as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention I does not require steps of identifying an air interface standard for wireless communication; and configuring a wireless communication device according to the identified air interface standard and in responsive to a configuration data. The subcombination has separate utility such as storage location of a wireless

communication device where the configuration data is retrieved, a wireless link wherein the configuration data is received over, etc.

4. Inventions I and IV are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination (Invention I) as claimed does not require the particulars of the subcombination (Invention IV) as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because:

- the invention [I] does not require procedures of receiving signals transmitted using a tunable transmit antenna; and providing a return signal indicative of a tuning correction required of a portable radio; and the subcombination has separate utility such as a base station, etc., as recited in claims 31–33; and

- the invention [I] does not require procedures of operating at a base station in detecting an error condition and transmitting to a portable device a

return signals to correct the error condition; and the subcombination has separate utility such as a base station, etc., as recited in claims 37-39.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. A telephone call was made to John G. Rauch on 5/3/2004 to request an oral election to the above restriction requirement, but did not result in an election being made.

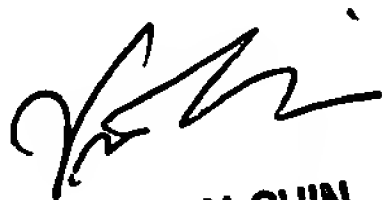
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D Phu whose telephone number is (703)305-8635. The examiner can normally be reached on 8:00-16:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
6/1/04

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Examiner
Art Unit 2682